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Easterling,	Deborah
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From: Easterling, Deborah

Monday, February 06, 2017 9:59 AM Sent:

To: 'Carpenter, David O' **RE: Smart Meters** Subject:

Dear Dr. David O. Carpenter:

This is to acknowledge receipt of your Letter of Protest/Comments to the Public Service Commission of South Carolina. Your Letter of Protest/Comments has been placed in the Protest File of the Dockets listed below and on the Commission's Website at www.psc.sc.gov.

2017-19-E - V. Edward Holloway, Complainant/Petitioner v. Duke Energy Carolinas, LLC, Defendant/Respondent (Complaint Available for Viewing upon Written Request)

2013-59-E - Application of Duke Energy Carolinas, LLC for Authority to Adjust and Increase Its Electric Rates and Charges 2016-366-E - Lisa M. Meserve, Complainant/Petitioner v. Duke Energy Carolinas, LLC, Defendant/Respondent (Entire Complaint Available for Viewing upon Written Request)

2016-354-E - Duke Energy Carolinas, LLC's Request for Approval of AMI Opt-Out Rider

A Protestant is an individual objecting on the ground of private or public interest to the approval of an Application, Petition, Motion or other matters which the Commission may have under consideration. A Protestant may offer sworn testimony but cannot cross-examine witnesses offered by other parties.

According to the Commission's Rules of Practice and Procedure, filing a Protest does not make you a Party of Record. A Protestant desiring to become an Intervenor (i.e., a Party of Record) in a proceeding before the Commission may file a Petition for Intervention within the time prescribed by the Commission.

If we may be of further assistance to you, please do not hesitate to contactous,

Sincerely,

Deborah Easterling **Executive Assistant** 803-896-5133

From: Carpenter, David O [mailto

Sent: Friday, February 03, 2017 9:43 AM

To: Hipp, Dawn < dhipp@regstaff.sc.gov>; PSC_Contact < Contact@psc.sc.gov>

Subject: Smart Meters

Please find attached a letter with regard to the adverse health effects resulting from exposure to radiofrequency radiation coming from smart meters. Thank you for your consideration. David O. Carpenter, MD

David O. Carp	enter, MD	
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Rensselaer, NY 12144

Institute for Health and the Environment



3 February 2017

State of South Carolina Office of Regulatory Staff 1401 Main Street, Suite 900 Columbia, SC 29201

Public Service Commission of South Carolina 101 Executive Center Drive Suite 100 Columbia, SC 29210

Re: Docket 2017-1908; Docket No 2013-59-E Docket No 2016-366-E; Docket No 2016-354-E and all other Case Files Regarding Wireless Utility Meters (ie., AMI, AMR, AMS, ERT, Wireless,. Smart Meters, etc.)

Dear Public Service Commission of South Carolina, State of South Carolina Regulatory Staff, All Electric, Gas and Water Utility Companies, President, Agents, Officers, Employees, Contractors and Interested Parties:

We, the undersigned, are scientists and health professionals who together have co-authored many peer-reviewed studies on the health effects of radiofrequency radiation (RFR). We are aware that the Public Service Commission of South Carolina is considering a proposed smart meter opt-out fee from Duke Energy. Smart meters, along with other wireless devices, have created significant public health problems caused by the radiofrequency radiation (RFR) they produce, and awareness and reported problems continue to grow. With Duke Energy being America's largest utility provider and, consequently, having the largest potential smart meter implementation reach, it is imperative that the Public Service Commission od South Carolina be fully aware of the harm that RFR can cause and allow utility customers to opt out of smart meter installation with no penalty.

The majority of the scientific literature related to RFR stems from cell phone studies. There is strong evidence that people who use a cell phone held directly to their ear for more than ten years are at significantly increased risk of developing gliomas of the brain and acoustic neuromas of the auditory nerve. There is also evidence that the risk of developing these cancers is greater in younger than older people. The May 2016 report from the US National Toxicology Program showing that rats exposed to cell phone radiation for nine hours per day over their life-span develop gliomas of the brain and Schwannoma of the heart (the same kind of cancer as acoustic neuroma) adds proof to the conclusions from the human health studies that radiofrequency radiation increases risk of cancer.

Smart meters and cell phones occupy similar frequency bands of the electromagnetic spectrum, meaning that cell phone research directly applies to smart meter RFR. Smart meter RFR consists of frequent, very intense but very brief pulses throughout the day. Because smart meter exposure over a 24 hour period can be very prolonged (pulses can average 9,600 times a day), and because there is building evidence that the sharp, high intensity pulses are particularly harmful, the cell phone study findings are applicable when discussing adverse health impacts from smart meters.

While the strongest evidence for hazards coming from RFR is for cancer, there is a growing body of evidence that some people develop a condition called electro-hypersensitivity (EHS). These individuals respond to being in the presence of RFR with a variety of symptoms, including headache, fatigue, memory loss, ringing in the ears, "brain fog" and burning, tingling and itchy skin. Some reports indicate that up to three percent of the population may develop these symptoms, and that exposure to smart meters is a trigger for development of EHS.

In short:

- Smart meters operate with much more frequent pulses than do cell phones, increasing the potential for adverse health impacts.
- Smart meter pulses can average 9,600 times a day, and up to 190,000 signals a day. Cell phones only pulse when they are on.
- Cell phone RFR is concentrated, affecting the head or the area where the phone stored, whereas smart meter RFR affects the entire body.
- An individual can choose whether or not to use a cell phone and for what period of time. When smart meters are placed on a home the occupants have no option but to be continuously exposed to RFR.

The Public Service Commission should not be relying on industry representatives for assistance, due to their obvious conflict of interest. Too often they rely on biased research and hold opinions that are not consistent with medical evidence. The symptoms and illnesses experienced from wireless utility meters are related to length and accumulation of exposure and therefore not everyone will exhibit symptoms immediately. In addition, as with many other diseases, not everyone is equally susceptible. There are a number of double-blind studies which clearly show that some people with EHS will develop symptoms when exposure to RFR is studied in a double blinded experimental protocol, in which the subject do not know whether or not the RFR is being applied. These individual are not suffering from a psychosomatic disease, but rather one that is induced by the exposure to RFR. Public health agencies that label these symptoms as being only psychosomatic are ignoring this evidence and are not working to ensure fair treatment of and protection of the public.

The adverse health impacts of low intensity RFR are real, significant and for some people debilitating. We want to stress three fundamentals as your agency proceeds to consider a smart meter opt-out:

- The Federal Communication Commission's safety standards do not apply to low intensity RFR.
- There is no safe level of exposure established for RFR.
- People around the world are suffering from low intensity RFR exposure, being at increased risk of developing both cancer and EHS.

Citizens rely on their government agencies for protection from harm. Accordingly, we urge the Public Service Commission of South Carolina to reject any fees or tariffs associated with smart meter opt-out and allow citizens to opt out without penalty.

Thank you for your attention and consideration. What you do in this instance affects the lives of many in South Carolina and beyond.

Yours sincerely,

David O. Carpenter, M.D.

Director, Institute for Health and the Environment

About O'argente

University at Albany

Dr. Lennart Hardell, MD, PhD

Professor

Department of Oncology, University Hospital

Orebro, Sweden

Dr. Magda Havas, BSc, PhD

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